

Program of the 2nd international symposium on SOMS

February 27, 2014

11:00-11:10	Opening Remarks Jun-ichi Hanna (Tokyo Institute of Technology, Japan) Yasuhiro Horiike (Research Supervisor at Japan Science and Technology, JST, Agency, Japan)
11:10-12:00	Jun-ichi Hanna (Tokyo Institute of Technology, Japan) Present status of self-organizing molecular semiconductors towards device applications
12:00-13:30	Lunch Time
13:30-14:00 Mat I-1	Jinsang Kim (University of Michigan, USA) Lyotropic liquid crystalline conjugated polymers with directed alignment capability for plastic electronics
14:00-14:30 Mat I-2	Fabrice Mathevet (UPMC-CNRS, France) Intertwined lamello-columnar co-assemblies in liquid-crystalline side-chain π -conjugated polymers: towards a new class of nanostructured supramolecular organic semiconductors
14:30-14:50 Mat O-1	Kazuchika Ohta (Shinshu University, Japan) Liquid crystals and homeotropically aligned thin films based on phthalocyanine-fullerene dyads toward solar cells
14:50-15:10 Mat O-2	Xu-Ying Liu (Tokyo Institute of Technology, Japan) Fast ambipolar charge transport in self-organized truxene derivatives
15:10-15:30	Coffee break
15:30-16:00 Mat I-3	Masahiro Funahashi (Kagawa University, Japan) Nanosegregated liquid-crystalline semiconductors bearing oligosiloxane moieties
16:00-16:20 Mat O-3	Takayuki Usui (Tokyo Institute of Technology, Japan) Chemical modification of Ph-BTBT derivatives for lowering a temperature range for smectic E phase
16:30-18:30	Poster session (Light foods and soft drinks will be provided)

February 28, 2014

10:00-10:30 Phys I-1	Denis Andrienko (Max Planck Institute for Polymer Research, Germany) Design rules for organic semiconductors for optoelectronic applications
10:30-10:50 Phys O-1	Makoto Yoneya (Advanced Industrial Science and Technology, Japan) Discotic phase structure of a non-peripheral octa-substituted phthalocyanine with high carrier mobility: A molecular simulation study
10:50-11:10 Phys O-2	Akira Ohno (Tokyo Institute of Technology, Japan) Structural order and charge transport in liquid crystals
11:10-11:40 Phys I-2	Shu Seki (Osaka University, Japan) Electrode-less measurement of charge carrier mobility in liquid crystalline materials
11:40-12:00 Phys O-3	Yves Geerts (Université libre de Bruxelles, Belgium) Molecular and supramolecular engineering of benzothienobenzothiophenes (BTBTs) for improved charge transport
12:00-13:30	Lunch time
13:30-14:00 Dev I-1	Tatsuo Hasegawa (Advanced Industrial Science and Technology, Japan) TBA
14:00-14:20 Dev O-1	Kazuo Takimiya (RIKEN, Japan) Recent progress on DNTT-based materials
14:20-14:40 Dev O-2	Hiroaki Iino (Tokyo Institute of Technology, Japan) High FET mobilities in organic field effect transistors with highly ordered smectic liquid crystals
14:40-15:10 Dev I-2	Yun Ho Kim (Korea Research Institute of Chemical Technology, Korea) Fabrication of crystalline films by microcontact printing technique with liquid crystalline organic semiconductors and FET applications
15:10-15:30 Dev O-3	Masatoshi Sakai (Chiba University, Japan) Fabrication of organic thin film transistor by thermal lamination process aiming at solvent-free printing
15:30-15:50	Coffee break
15:50-16:20 Dev I-3	Takuma Yasuda (Kyushu University, Japan) Materials design of self-organizing organic semiconductors toward applications to organic electronics
16:20-16:40 Dev O-4	Yo Shimizu (Advanced Industrial Science and Technology, Japan) Miscibility of PCBM into LC phthalocyanines for structure-controlled bulk heterojunction active layer in organic photovoltaics
16:40-17:00 Dev O-5	Akihiko Fujii (Osaka University, Japan) Bulk-heterojunction organic solar cells utilizing discotic liquid crystalline phthalocyanine
17:00-17:20 Dev O-6	Kyohei Nakano (Tokyo Institute of Technology, Japan) Self-organization in bulk heterojunction solar cells with small molecules
17:20-17:30	Closing Remarks (Jun-ichi Hanna)

Poster session

- Mat Thermoplastic fluorescent conjugated polymers: benefits of preventing π - π stacking**
Chengjun Pan, Kazunori Sugiyasu, Yutaka Wakayama, Akira Sato, and Masayuki Takeuchi (National Institute for Materials Science)
- Mat Convenient synthesis of asymmetric benzothienobenzothiophenes and their characterization and OFET applications**
Hisashi Okamura, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- Mat Self-organized molecular columns based on n-type semiconducting hexaazatrinaphthylenes (HATNAs)**
Xu-Ying Liu, Takayuki Usui, and Jun-ichi Hanna (Tokyo Institute of Technology)
- Mat Hybrid-aligned dye-doped polymer-stabilized liquid crystal for nonlinear optical molecular reorientation**
Jing Wang, Yosuke Aihara, Motoi Kinoshita, Jun-ichi Mamiya, and Atsushi Shishido (Tokyo Institute of Technology)
- Mat Polymer-stabilization enhanced orientational optical nonlinearity in oligothiophene-doped nematic liquid crystals**
Motoi Kinoshita, Yosuke Aihara, Jing Wang, and Atsushi Shishido (Tokyo Institute of Technology)
- Mat Highly aligned molecules induced by dynamic photopolymerization of anisotropic monomers**
Kyohei Hisano, Jun-ichi Mamiya, Motoi Kinoshita, and Atsushi Shishido (Tokyo Institute of Technology)
- Mat Elucidation of additive effect of precision polymers in dynamic photopolymerization process**
Wataru Nakano, Jun-ichi Mamiya, Motoi Kinoshita, and Atsushi Shishido (Tokyo Institute of Technology)
- Mat Uniaxial molecular alignment of anisotropic monomer using dynamic photopolymerization**
Takahiro Oguma, Jun-ichi Mamiya, Motoi Kinoshita, and Atsushi Shishido (Tokyo Institute of Technology)
- Phys Molecular design of discotic liquid crystals with high charge mobility**
Yi-Fei Wang, Wen-Guang Wang, Chun-Xiu Zhang, and Jia-Ling Pu (Beijing Institute of Graphic Communication)
- Phys Construction of measurement system for lateral time of flight method**
Junichi Kougo, Masanori Yokoyama, Fumito Araoka, and Ken Ishikawa (Tokyo Institute of Technology)
- Phys Alignment behavior of liquid-crystalline oligothiophene and terthiophene-based side chain polymer on photocrosslinkable liquid-crystalline polymer films**
Mizuho Kondo, Yuki Koeduka, Masahiro Funahashi, and Nobuhiro Kawatsuki (University of Hyogo)
- Phys Enhanced charge injection in ferroelectric liquid crystals**
Miho Higuchi, Yukiko Takayashiki, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- Phys Carrier transport properties of SmE phase in a wide temperature range**
Takenori Nitta, Takayuki Usui, Akira Ohno, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- Dev Synthesis, and properties of two Pechmann dye derivatives and their organic field-effect transistors performance**
Ti Wu and Jialing Pu (Beijing Institute of Graphic Communication)
- Dev Naphthodithiophene diimide (NDTI): synthesis, structure, and applications**
Masahiro Nakano, Yuta Fukutomi, Itaru Osaka, and Kazuo Takamiya (RIKEN)

- Dev** **Synthesis of high-performance semiconducting polymers using 5,10-diborylated naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole**
Kazuaki Kawashima, Eigo Miyazaki, Masafumi Shimawaki, Yuki Inoue, Hiroki Mori, Noriko Takemura, Itaru Osaka, and Kazuo Takimiya (RIKEN)
- DEV** **Solution-processed bottom-contact bottom-gate type organic field effect transistor using a liquid crystalline semiconductor, 8TNAT8**
Hirosato Monobe, Masaomi Kimoto, and Yo Shimizu (National Institute of Advanced Industrial Science and Technology)
- DEV** **Synthesis and OFET application of thienothiophenedione-based semiconducting polymers**
Kohsuke Kawabata, Itaru Osaka, Tomoyuki Koganezawa, and Kazuo Takimiya (RIKEN)
- DEV** **Threshold voltage instability of organic field-effect transistors suppressed by thermal dissociation of hydroxyl groups in SiO₂ gate dielectrics**
Masafumi Kunii, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- DEV** **Fabrication of polycrystalline thin films of smectic liquid crystalline materials by solution process at room temperature**
Hiroshi Matsuno, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- DEV** **High mobility in solution processed bottom-gate bottom-contact FET fabricated with Ph-BTBT-10**
Taiki Sato, Hiroaki Iino, and Jun-ichi Hanna (Tokyo Institute of Technology)
- DEV** **Synthesis, characterization and photovoltaic properties of donor-acceptor dyad molecules**
Seiichiro Izawa, Takeshi Nishizawa, Kazuhito Hashimoto, and Keisuke Tajima (RIKEN)
- DEV** **Thiazolothiazole-based semiconducting copolymers: improvement of photovoltaic performances through control of polymer orientation**
M. Saito, I. Osaka, K. Takimiya, and T. Koganezawa (RIKEN)
- DEV** **Fine-tuning the self-assembly of liquid crystalline phthalocyanines – a molecular design approach towards efficient solar cell devices**
Lydia Sosa-Vargas, Fabien Nekelson, Daiju Okuda, Minokazu Takahashi, Hiroyuki Yoshida, Akihiko Fujii, Masanori Ozaki, and Yo Shimizu (National Institute of Advanced Industrial Science and Technology)